

Claims:

1. A method of treating viral infections in a patient which method comprises co-administering to said patient a therapeutically effective amount of interferon  
5 and a low dose of ribavirin.
2. A method according to claim 1, wherein the ribavirin is administered orally and at a dose delivery rate sufficient to provide a clinically effective blood level in the portal vein and less than required to provide a clinically effective  
10 blood level in the peripheral circulation to thereby provide a dose-delivery rate having a selective antiviral and interferon potentiating effect in the liver.
3. A method according to claim 1, wherein the low-dose of ribavirin is administered in a slow-release formulation to provide a clinically effective blood  
15 level in the portal vein and less than required to provide a clinically effective blood level in the peripheral circulation.
4. The method according to claim 3, wherein the formulation of ribavirin is a controlled-release formulation.  
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5. The method according to claim 4, wherein the controlled-release formulation releases ribavirin by a mechanism chosen from diffusion and erosion.
- 25 6. The method according to claim 4, wherein the controlled-release formulation of ribavirin comprises at least one of polymer-coated multiparticulates, polymer-coated tablets, polymer-coated minitables, and hydrophilic matrix tablets.
- 30 7. The method according to claim 1, wherein the ribavirin dose is less than 400 mg/day.
8. A method according to claim 7, wherein the ribavirin dose is in the range of from 5 to 399 mg/day.

9. A method according to claim 8, wherein the ribavirin dose is in the range of from 20 to 350 mg/day.
- 5 10. A method according to claim 1, wherein the ribavirin dose is varied according to the body weight of the patient.
11. A method according to claim 10, wherein the ribavirin dose is less than 6 mg/kg/day.
- 10 12. A method according to claim 11, wherein the ribavirin dose is less than 5 mg/kg/day.
13. A method according to claim 12, wherein the ribavirin dose is in the range of from 1 to 5 mg/kg/day.
- 15 14. The method according to claim 13, wherein the viral infection is hepatitis C.
- 20 15. The method according to claim 1, wherein the ribavirin is in the form of at least one of a ribavirin ester, salt, or analogue of ribavirin shown to be effective as an antiviral agent.
- 25 16. The method according to claim 15, wherein the interferon is interferon alfa or pegylated interferon alfa.
17. The method of claim 16, wherein the interferon is interferon alfa 2b.
18. The method according to claim 17, wherein the interferon is administered parenterally.
- 30 19. The method according to claim 18, wherein the interferon is administered by subcutaneous IV or IM injection.

20. The method according to claim 19, wherein the interferon is administered parenterally in an amount of from 2 to 10 million IU per week on a weekly, thrice weekly ("TIW"), every other day ("QOD") or daily basis.

5 21. The method according to claim 16, wherein the pegylated interferon alfa is pegylated interferon alfa-2b and is administered systemically in an amount of 0.5 to 2.0 micrograms per kilogram of body weight per week on a weekly, TIW, QOD or daily basis.

10 22. The method according to claim 16, wherein the pegylated interferon alfa is pegylated interferon alfa-2a and is administered systemically in an amount of 20 to 250 micrograms per kilogram of body weight per week on a weekly, TIW, QOD or daily basis.

15 23. A method of treating viral infections in a patient which method comprises co-administering to said patient a therapeutically effective amount of interferon with ribavirin which is administered as a slow release formulation.

20 24. The method according to claim 23, wherein the dose of the ribavirin used is in the range of from 5 to 800 mg/day.

25 25. The method according to claim 24, wherein the ribavirin dose is in the range of from 400 to 800 mg/day.

26 26. The method according to claim 24, wherein the ribavirin dose is less than 400 mg/day.

27. The method according to claim 26, wherein the ribavirin dose is in the range of from 5 to 399 mg/day.

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28. A method of treating viral infections in a patient which method comprises co-administering to said patient a therapeutically effective amount of interferon with a low dose of ribavirin as a slow release formulation.

29. A method according to claim 28 further comprising an antioxidant or other membrane protective agent which is administered in systemic doses.
30. A method according to claim 28 further comprising an antioxidant or other membrane protective agent which is administered as a low-dose, slow-release formulation.
31. A method according to claim 28, further comprising an antioxidant or other membrane protective agent which is co-formulated with the ribavirin as a low-dose, slow-release formulation.
32. A use of a therapeutically effective amount of Interferon with a low dose of ribavirin and optionally an antioxidant or other membrane protective agent in the preparation of a medicament to treat viral infections in a patient.
33. A kit for use in the treatment of viral infections comprising a therapeutically effective amount of interferon in combination with ribavirin and optionally an antioxidant or other membrane protective agent as a slow-release formulation.
34. A kit according to claim 33 wherein the kit comprises unit doses of ribavirin providing a dose delivery rate sufficient to provide a clinically effective blood level in the portal vein and less than required to provide a clinically effective blood level in the peripheral circulation to thereby provide a dose-delivery rate having a selective antiviral and interferon potentiating effect in the liver.
35. A kit according to claim 33 wherein the low-dose of ribavirin is administered in a slow-release formulation to provide a clinically effective blood level in the portal vein and less than required to provide a clinically effective blood level in the peripheral circulation.

36. A kit according to claim 35 wherein the slow-release formulation of ribavirin comprises at least one of polymer-coated multiparticulates, polymer-coated tablets, polymer-coated minitables, and hydrophilic matrix tablets.
- 5 37. A kit according to claim 35 wherein the unit dose of ribavirin is less than 400 mg/day.
38. A kit according to claim 35 wherein the unit dose of ribavirin is less than 6 mg/kg/day.
- 10 39. A kit according to claim 33 wherein the ribavirin is in the form of at least one of a ribavirin ester, salt or analogue or ribavirin shown to be effective as an antiviral agent.
- 15 40. A kit according to claim 33 wherein the interferon is in a form for parenteral administration.
41. A kit according to claim 33 comprising unit doses of interferon for providing an amount of from 2 to 10 million IU per week by thrice weekly ("TIW"), every other day ("QOD") or daily administration.
- 20 42. A kit according to claim 33 wherein the interferon is interferon alfa or pegylated interferon alfa.
- 25 43. A pharmaceutical composition for the treatment of viral infections in a patient comprising a therapeutically effective amount of interferon together with a low dose of ribavirin and optionally an antioxidant or other membrane protective agent.